

which were originally more important than at present. As the outcome of these considerations, Perrier relinquished the division of the Asteroidea into two sections or subdivisions, and divided the class into four orders, which he considers may be characterised by the form of the pedicellariæ.

The following is Perrier's¹ summary of his classification, given verbatim :—

1. FORCIPULATÆ.

Pédicellaires pédonculés, droits ou croisés.

Familles: BRISINGIDÆ, PEDICELLASTERIDÆ, ASTERIIDÆ, HELIASTERIDÆ.

2. SPINULOSÆ.

Pédicellaires en pince, résultant d'une modification des piquants.

Familles: ECHINASTERIDÆ, PTERASTERIDÆ, ASTERINIDÆ.

3. VALVATÆ.

Pédicellaires valvulaires ou en salière.

Familles: LINCKIADÆ, GONIASTERIDÆ, ASTEROPSIDÆ.

4. PAXILLOSÆ.

Pédicellaires formés par un ossicule squelettique et les piquants qui le recouvrent.

Familles: ARCHASTERIDÆ, ASTROPECTINIDÆ.

On subsequent pages of the same memoir the names "Spinulosæ" and "Valvatæ" are changed to "Echinulatæ"² and "Valvulatæ"³ respectively, and the following additions are made to the families mentioned :—In the order Spinulosæ, the families "Mithrodinæ" and Solasteridæ are included,⁴ and in the order Valvatæ (or Valvulatæ) the families "Gymnasteriadæ," Pentacerotidæ, Antheneidæ, and Pentagonasteridæ take the place⁵ of the Goniasteridæ and Asteropsidæ of the above list. Three pages further on another family, Gonioplectinidæ,⁶ is also referred to this order, Valvulatæ; but in the descriptive part of the memoir, the type (and only) genus, *Goniopecten*, is placed⁷ under the family Archasteridæ in the order Paxillosæ.

¹ *Op. cit.*, p. 154.

² *Op. cit.*, pp. 164, 167, 221.

³ *Op. cit.*, p. 165.

⁴ *Op. cit.*, p. 249.

⁵ *Op. cit.*, pp. 167, 206.

⁶ *Op. cit.*, p. 164.

⁷ *Op. cit.*, p. 168.